

United States Environmental Protection Agency
Air and Waste Management Division - Region 2

Waste Minimization Audit
Facility Information

Date 9/1/95 Time 8:00 AM
Facility Name GRUMMAN AEROSPACE CORP
EPA ID# NYD 002 047967
Street Address 1111 STEWART AVE
BETHPAGE, NY 11714
Mailing Address SAME

Point of Contact (Name/Title) Arthur Gibson / Director ENUR Affairs ;
John Ohlmann / Director ENUR Compliance ; Joe Sosco / ENUR ENG.
Telephone (516) 575-2333
Fax # (516) 575-3631
Inspector (Name/Title) David Rawicz, A.T. KEARNEY, INC

Inspector's Telephone (610)-617-8989



Waste Minimization Audit

A. Facility Overview

1. Describe Facility Operation

Electronics Development & Research; Manufacturing of
Magnets for particle accelerator.

2. SIC code(s)

3721

3. List Current Waste Generated (Waste Code, Amount/^{YEAR}Month,
Discharge)

SEE ANNUAL 1994 HAZARDOUS WASTE REPORT

Waste Code	Amount	Air Emission/Waste Water/Haz Waste
_____	_____	_____/_____/_____
_____	_____	_____/_____/_____
_____	_____	_____/_____/_____
_____	_____	_____/_____/_____
_____	_____	_____/_____/_____
_____	_____	_____/_____/_____

4. Describe how each waste stream is generated

SEE HAZWASTE REPORT

Building closures generate a majority
of waste.

5. Describe Disposal Management Practices
(Onsite/Offsite/TSD/Treatment/Recycle)

_____	<u>ON-site WWTP</u>
_____	<u>Off-site → Laidlaw ENVIR. SERVICES</u>
_____	_____
_____	_____
_____	_____
_____	_____

1. Waste Minimization Plan

SEE PLAN

2. Waste Minimization Options Implemented for waste codes described (Project Outline/Waste Stream Reduction Goals/Date?Method of Implementation Resources/Accomplishments/Reduction Calculations)

SEE HWRP.

Have begun three year consolidation plan (95,96,97)
& will produce WASTE STREAMS from closeout only.
After close-out is completed they may have a
little R+D WASTE. HAVE SET CORPORATE GOAL
TO REDUCE MANIFESTED WASTE BY 90% by 1996 from
1989 baseline. From a production standpoint,
WASTES will be minimal.

3. For each Waste Minimization Project Implemented Describe Benefits, (i.e., Financial, Facility Operations, Product, Waste Management)

Since the facility is closing down activities. long-term goals have been cancelled and the facilities return on some WASTE MIN. INVESTMENTS will be non-existent.

4. Waste Minimization Options Explored for waste codes (Describe actual steps taken to implement options, provide documentation), (i.e., phone correspondence, journal reviews, etc.)

The facility was exploring substitutes for
1,1,1-TCA but have contract expiring at
end of year AND will not use 111, TCA.

C. Company's Commitment

1. What role do the following individuals play in the waste minimization program, (i.e., Support, Suggestions, Incentives)

Upper Manager

CEO Set Corporate policy for 90% reduction. V.P. of site is very active in making sure they reach site goals.

Departmental (Engineering, Quality Control, Accounting, Purchasing, Legal)

Handled by ENUR GROUP who works with the Materials & Process Group & Navy Qualifications, & R & D ON WASTE MEN ACTIVITIES.

Operations Personnel (i.e., Equipment Operators, Line Workers, etc.)

Not much activity

D. Manifest Certification

4. Does the facility sign and understand manifest certification requiring waste minimization efforts?

☒ YES ☐ NO

E. Compliance Assistance

1. Would the company like to receive from the EPA information on any of the following:

<input checked="" type="checkbox"/>	Waste Minimization
<input checked="" type="checkbox"/>	Technical Assistance Materials
<input checked="" type="checkbox"/>	Clean Air Act
<input checked="" type="checkbox"/>	Ozone Depleting Substances
<input checked="" type="checkbox"/>	Combustion Initiative
<input checked="" type="checkbox"/>	Recycling
<input type="checkbox"/>	Other _____

ADDITIONAL
CLEAN UP

AUDIT SUMMARY REPORT

Project Number: R02025
Project Name: Waste Minimization Audit
Facility Name: Grumman Aerospace Corporation
Facility ID #: NYD002047967
Facility Address: Stewart Avenue
Mailstop: D08-GHQ
Bethpage, NY 11714-3580
Suffolk County
(516) 575-2333
Facility Phone Number:
Inspector(s): Dave Rawicz
Date of Inspection: September 1, 1995
Arrival/Departure: 8:00 AM/11:00 AM
Facility Representative(s): Arthur Gibson, Director Environmental Affairs, John Ohlmann, Director Environmental Technology and Compliance, Joseph Susco, Senior Environmental Engineer

Exterior Observations:

- **Weather:** Sunny, 77-80° F
- **Land Use:** Industrial/Residential area.
- **Sensitive Areas/
Surface Waters:** None observed.

Operations and Process Description:

Grumman Aerospace Corporation, Bethpage, NY, historically has had several operations and processes at the facility including paint stripping and painting of aircraft or aircraft parts, vapor degreasing, descaling, general cleaning of manufactured parts, chromic acid anodizing of parts, brush cadmium plating metal finishing, chemical milling and etching of aluminum and titanium, conversion coating, and heat treating and treatment of waste generated at the Bethpage and Calverton facilities. However, since 1991 most of these processes have been eliminated as a result of the company's deactivation of the facility. Currently, there is electronics research and development (R & D) and manufacturing of magnets for a particle accelerator. The facility has a Part 373 permit to store hazardous wastes on-site. The company also has two wastewater treatment plants (WWTP) that have a capacity of 500,000 gallons per day but are currently treating less than 50,000 g/d. The facility encompasses approximately 575 acres and is comprised of many buildings.

The facility is currently in the first of a three year consolidation plan which is expected to be completed by the end of 1997. Also the company which currently uses 1,1,1-trichloroethane for wiping down parts expects to close down the process by early 1996 since the contract expires.

The close-down and ongoing R & D activities as well as general maintenance at the Grumman facility produced over 70 waste streams in 1994 but most of the wastes can be attributed to the close-down activities (see Attachment 1). For the next few years of the companies consolidation plan, the following waste streams can be expected to be produced:

- Lab Packs from building close-down
- Lab Packs from R & D activities
- Bulk Waste Streams from process/building close-down
- Waste Streams from degreasing activities

These wastes are either treated on-site (WWTP) or sent off-site to be recycled, treated or disposed of depending on the nature of the waste and its recyclability.

Waste Minimization Plan:

Grumman submitted their original Hazardous Waste Reduction Plan (HWRP) to the New York State Department of Environmental Conservation in July, 1990. In their most recent HWRP Update, due to the deactivation activities of the company, it has shifted its focus on minimizing the wastes associated with the close-down of the buildings on-site (See Attachment 2).

Grumman Aerospace Corporation (GAC) initiated a hazardous waste minimization program for all GAC facilities in the early 1970s. The objectives of this program were to include good engineering/manufacturing practices with cost reduction and protection of the environment. Since the initial program GAC has implemented many activities as described in Section 5 of the HWRP Update. As a result of the pending deactivation of the facility, numerous waste minimization projects have been cancelled since they will no longer be applicable to activities on the site.

Although the facility is closing down most operations, there are still general corporate waste minimization activities that must be followed on the site. A sign-off as well as a completed checklist on all new chemicals to be used on-site is required. R & D is encouraged to take a "life-cycle" analysis when developing new processes and products although they are not required to do so. There are corporate goals such as reducing wastes from 1989 levels by 90 % by 1996. The company is also participating in the 30/55 program. The site specific plan for the Electronics and Systems Integration Division also stresses these programs (see Attachment 3).

Implementation of Waste Minimization Plan:

Though many activities were implemented since the early 1970s, the facility has basically cancelled any future activities since the plant is in the process of closing down and changing operations. The facility is trying to recover any excess material from close-down of the

buildings but still expects a significant amount of wastes to be generated over the next two years. The facility still is tracking waste and is committed to meeting the goals set for the facility (see Attachment 4).

The facility representatives stated that the company does share waste minimization activities with other companies at an annual Aerospace Industry Association meeting in which past achievements are presented in a conference format.

According to the facility representatives, corporate management sets the policy and was very supportive financially for past projects. They also noted that the vice-president for the Bethpage Site is very active in making sure that the facility achieves it's goals. The Environmental Department handles the lead on waste minimization activities but has coordinated activities such as finding less hazardous chemical substitutes with the Materials & Process Group, Navy qualifications, and R & D.

As with other government related industries, a majority of waste minimization activities have to be qualified before they are implemented. As a result some activities had to be altered or cancelled.

Photographs:

None Taken.

**Documents Reviewed:
(Copies Attached)**

1994 Hazardous Waste Report to the State
New York. (Attachment 1)
1995 Hazardous Waste Reduction Plan
Update. (Attachment 2)
1995 Electronics and Systems Integration
Division Hazardous Waste Minimization
Update. (Attachment 3)
1995 ESID Hazardous Waste Activity
Summary. (Attachment 4)

Regulatory Concerns:

None.

Summary:

The company appears to have been committed to waste minimization activities for many years. Due to the transition period at the facility, it does not seem that any new waste minimization activities will be implemented. However, if their facility plans change, the facility representatives stated that waste minimization activities would be applied to any new process or manufacturing line implemented.

The facility representatives did request a copy of this report in the closing meeting. They were instructed to direct their request to the Environmental Protection Agency's Work Assignment Manager as described in the Letter of Entry.